



Sheet 1 of 4

FORM PTO-1449 LIST OF REFERENCES CITED BY APPLICANT				ATTY. DOCKET NO. VTE-152-B		SERIAL NO. 10/817,511	
				APPLICANT Bugel et al.			
				FILING DATE April 2, 2004		GROUP 3745	
U. S. PATENT DOCUMENT							
EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>7/20/</i>	AA	6,567,255	5/20/2003	Panzer et al.			
	AB	6,453,261	9/17/2002	Boger et al.			
	AC	6,431,340	8/13/2002	Ineson et al.			
	AD	6,305,264	10/23/2001	Yang et al.			
	AE	6,291,928	9/18/2001	Lazarus et al.			
	AF	6,230,806	5/15/2001	Sato			
	AG	6,085,632	7/11/2000	Stoll et al.			
	AH	6,003,428	12/21/1999	Mundie et al.			
	AI	5,950,668	9/14/1999	Baumann			
	AJ	5,587,536	12/24/1998	Rasmussen			
	AK	5,465,021	11/7/1995	Visscher et al.			
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
<i>7/20/</i>	AL	61296/81	27-12-86	<i>Europe Japan</i>			
	AM	0 325 764	02.08.89	Europe			
	AN	01185175	24.07.89	<i>Europe Japan</i>			
	AO	WO 01/78160		PCT			
	AP						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
	AR						
	AS						
	AT						
EXAMINER <i>L. Shapp</i>				DATE CONSIDERED <i>9/26/05</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.							

FORM PTO-1449

LIST OF REFERENCES CITED BY APPLICANT

ATTY. DOCKET NO.
VTE-152-BSERIAL NO.
10/817,511APPLICANT
Bugel et al.FILING DATE
April 2, 2004GROUP
3745

U. S. PATENT DOCUMENT

EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>TAC</i>	AA	5,425,941	6/20/1995	Wilson et al.	1		
	AB	5,424,941	6/13/1995	Bolt et al.			
	AC	5,388,751	2/14/1995	Harada et al.			
	AD	5,333,455	8/2/1994	Yoshioka			
	AE	5,211,196	5/18/1993	Schwelm			
	AF	5,154,207	10/13/1992	Bolt			
	AG	4,932,311	6/12/1990	Mibu et al.			
	AH	4,901,625	2/20/1990	Bussan et al.			
	AI	4,878,417	11/7/1989	Facon			
	AJ	4,819,543	4/11/1989	Leinen			
<i>V</i>	AK	4,808,874	2/28/1989	Stahlhuth			

FOREIGN PATENT OR PUBLISHED PATENT APPLICATION

		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AL						
	AM						
	AN						
	AO						
	AP						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	AR	
	AS	
	AT	

EXAMINER

Shopez

DATE CONSIDERED

9/26/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.

FORM PTO-1449 LIST OF REFERENCES CITED BY APPLICANT				ATTY. DOCKET NO. VTE-152-B		SERIAL NO. 10/817,511	
				APPLICANT Bugel et al.			
				FILING DATE April 2, 2004		GROUP 3745	
U. S. PATENT DOCUMENT							
EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>gpr</i>	AA	4,790,233	12/13/1988	Backe et al.			
	AB	4,763,560	8/16/1988	Sasaki			
	AC	4,741,247	5/3/1988	Glomeau et al.			
	AD	4,736,131	4/5/1988	Fujimoto			
	AE	4,628,499	12/9/1986	Hammett			
	AF	4,481,768	11/13/1984	Goshorn et al.			
	AG	4,481,451	11/6/1984	Kautz et al.			
	AH	4,450,753	5/29/1984	Basrai et al.			
	AI	4,379,335	4/5/1983	Kirsch et al.			
	AJ	4,121,504	10/24/1978	Nowak			
✓	AK	4,106,390	8/15/1978	Kodaira et al.			
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AL						
	AM						
	AN						
	AO						
	AP						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
	AR						
	AS						
	AT						
EXAMINER <i>T. D. Hoxby</i>				DATE CONSIDERED <i>9/26/05</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.							

FORM PTO-1449 LIST OF REFERENCES CITED BY APPLICANT				ATTY. DOCKET NO. VTE-152-8		SERIAL NO. 10/817,511	
				APPLICANT Bugel et al.			
				FILING DATE April 2, 2004		GROUP 3745	
U. S. PATENT DOCUMENT							
EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>TPR</i>	AA	4,080,873	3/28/1978	Bauer et al.	 	 	
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
<i>TPR</i>	AL	US 2001/0030306	✓ 11/18/2001	Moler et al.	 	 	
	AM						
	AN						
	AO						
	AP						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
	AR						
	AS						
	AT						
EXAMINER	<i>TPR</i>			DATE CONSIDERED <i>9/26/03</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.							



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete If Known	
	Application Number	10/817,511
	Filing Date	April 2, 2004
	First Named Inventor	John Bugel et al.
	Art Unit	3745
	Examiner Name	Unknown
Sheet 1 of 1	Attorney Docket Number	VTE-152-B

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
*		US- 5,424,941	6/13/1995	Bolt et al.	
		US- 4,628,499	12/09/1986	Hammett	
*		US- 6,085,632	7/11/2000	Stoll et al.	
*		US- 5,431,086	7/11/1995	Morita et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁴
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				
		2 203 195 A	10/12/1988	U.K.		
		DE 101 22 297 C1	5/8/2001	Germany		

Examiner Signature	<i>J. D. Kopp</i>	Date Considered	9/26/05
-----------------------	-------------------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

* Previously cited



Sheet 1 of 1

FORM PTO-1449 LIST OF REFERENCES CITED BY APPLICANT				ATTY. DOCKET NO. VTE-152-B		SERIAL NO. 10/817,511	
				APPLICANT John Bugel, Jeff Moler & Mark Oudshoorn			
				FILING DATE April 2, 2004		GROUP 3745	
U. S. PATENT DOCUMENT							
EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
TBL	AA	6,759,790	7/6/2004	Bugel et al.	1	1	
	AB	6,642,067	11/4/2003	Dwyer			
	AC	6,548,938	4/15/2003	Moler et al.			
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AL						
	AM						
	AN						
	AO						
	AP						
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
	AR						
	AS						
	AT						
EXAMINER <i>J. D. Ropy</i>				DATE CONSIDERED <i>9/26/05</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.							

LIST OF REFERENCES CITED BY APPLICANT

ATTY. DOCKET NO.

VTE-152-B

SERIAL NO.

10/817,511

APPLICANT

John Bugel, Jeff Moler & Mark Oudshoorn

FILING DATE

April 2, 2004

GROUP

3745

U. S. PATENT DOCUMENT

EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>JML</i>	AA	3,099,289	07/30/1963	J. C. Neilson et al			
	AB	5,546,847	08/20/1996	Rector et al	91	403	
	AC	6,467,264	10/22/2002	Stephenson et al	60	460-368	
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT OR PUBLISHED PATENT APPLICATION

		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
	AL						
	AM						
	AN						
	AO						
	AP						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	
	AS	
	AT	

EXAMINER

J. D. Hory

DATE CONSIDERED

9/26/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.



Sheet 1 of 2

LIST OF REFERENCES CITED BY APPLICANT				ATTY. DOCKET NO. VTE-152-B		SERIAL NO. 10/817,511	
				APPLICANT John Bugel			
				FILING DATE April 2, 2004		GROUP 3475	
U. S. PATENT DOCUMENT							
EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>JBL</i>	AA	6,523,451	02-25-2003	Liao et al.			
	AB	6,234,060	05-22-2001	Jolly			
	AC	5,881,767	03-16-1999	Loser			
	AD	5,431,086	07-1995	Morita et al.			
<i>✓</i>	AE	5,271,226	12-21-1993	Stone			
	AF						
FOREIGN PATENT OR PUBLISHED PATENT APPLICATION							
		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
<i>JBL</i>	AL	GB2203195A	10-1988	UK			
	AM	DE 101 222 97C1	06-2002	Germany			
	AN	EP 1 391 647	06-17-2003	Europe			
<i>✓</i>		DE 199 12 334 A1	09-28-2000	Germany			
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)							
<i>JBL</i>		Kenji Okiyama and Ken Ichiryu; STUDY OF PNEUMATIC MOTION BASE CONTROL CHARACTERISTICS; Tokyo University of Technology					
	AO	Karim Khayati, Pascal Bigras, and Louis-A. Dessaint; NONLINEAR CONTROL OF PNEUMATIC SYSTEMS; Ecole de Technologie Supérieure; 1100, rue Notre-Dame Ouest, Montreal (Quebec) H3C 1K3					
	AP	HIGH SPEED SERVO PNEUMATIC ACTUATOR SYSTEMS; (modified on 13 January 2004); Design of High Speed Machinery (DHSM) LINK Programme; Engineering & Physical Sciences Research Council; Department of Trade & Industry; March 1995 to August 1997, Grant Reference: GR/K38663					
	AR	Journal of Zhejiang University SCIENCE; (ISSN 1009-3095, Monthly), 2001 vol. 2, no. 2, pages 128-131; CLC Number: TP271, 32; Document Code: A; RESEARCH ON THE CONTINUOUS POSITIONING CONTROL TO SERVO-PNEUMATIC SYSTEM; Tao Guo-liang, Wang Xuan-yin, & Lu Yong-xiang					
	AS	MODELING AND SIMULATION OF A SERVOPNEUMATIC GRIPPER; Salvador Esque and Jose LM Lastra, date 10 Dec 99					
	AT	MODIFIED FEEDBACK LINEARIZATION CONTROLLER FOR PNEUMATIC SYSTEM WITH NON-NEGLIGIBLE CONNECTION PORT RESTRICTION; Pascal Bigras, Karim Khayati, Tony Wong; University of Quebec					
<i>✓</i>	AU	ND9000 INTELLIGENT VALVE CONTROLLER; METSO AUTOMATION; date: July 7/2003					
EXAMINER <i>J. D. Hopy</i>				DATE CONSIDERED <i>9/27/05</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.							

FORM PTO-1449		LIST OF REFERENCES CITED BY APPLICANT		ATTY. DOCKET NO. VTE-152-B	SERIAL NO. 10/817,511
				APPLICANT John Bugel	
				FILING DATE April 2, 2004	GROUP 3745
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)					
Jm	AF	INTRODUCING PRECISIONAIRE – A BREAKTHROUGH PNEUMATIC MOTION SYSTEM			
	AG	AXIS CONTROLLER SPC 200; Festo AG&Co.; Products 2001			
	AH	KUHNE "SPEEDY" Machine Building Process Module; Switched Pneumatic Electrical Endposition Damping-E635 GM/02 92.652			
	AI	SWITCHED PNEUMATIC ELECTRICAL ENDPOSITION DAMPING; Werner Brockman; University of Lubeck Institute of Computer Engrg. Lubeck, Germany			
V	AJ	BLOCK-ORIENTED NONLINEAR CONTROL OF PNEUMATIC ACTUATOR SYSTEMS; fulin Xiang; Doctoral Thesis, Mechatronics Lab, Department of Machine Design, Royal Institute of Technology, KTH; S-100 44, Stockholm, Sweden, 2001.			
	AK	HYDRAULIC & PNEUMATIC ACTUATORS; Sensors & Actuators for Mechatronics Hydraulic and Pneumatic Actuators; K. Craig.			
	AL	ADAPTIVE NEURON CONTROL BASED ON PREDICTIVE MODEL IN PNEUMATIC SERVO SYSTEM; Huang Wenmei, Yang Yong, Tang Yali; College of Mechanical and Automotive Engrg. Hunan University, 410082, Changsha, Huna, P.R. China.			
	AM	PROPNEU – AN INTELLIGENT SOFTWARE TOOL; Hong Zhou, Ph.D., Festo AG & Co., Ruitersstr, 82, D-73734, Esslingen, Germany			
	AN	PNEUMATIC SERVO SYSTEMS CONTROLLED BY SELF-TUNING FUZZY RULES; Akira Shimizu, Satoru Shibata, and Mitsuru Jindai, Dept. of Mech. Eng. Ehime University, 3, Bunkyo-cho, 790-8577, Matsuyama, Ehime, Japan.			
	AO	MODELICA – Proceedings of the 3 rd International Modelica Conference, Linkoping, November 3-4, 2003, Peter Fritzson (editor)			
	AP	HIGH STEADY-STATE ACCURACY PNEUMATIC SERVO POSITIONING SYSTEM WITH PVA/PV CONTROL AND FRICTION COMPENSATION; Shu Ning and Gary M. Bone; Dept. of Mechanical Engrg., McMaster University, Hamilton, Ontario, Canada, L8S 4L7. Proceedings of the 2002 IEEE, International Conference on Robotics & Automation, Washington, DC – May 2002			
	AR	A HYBRID PNEUMATIC/ELECTROSTATIC MILI-ACTUATOR; Kenneth H. Chiang, Ronald S. Fearing; ROBOTICS AND INTELLIGENT MACHINES LABORATORY; Dept. of Electrical Engrg. And Computer Sciences; 265M Cory Hall, University of California, Berkeley, CA 94720-1770			
	AS	MODELING IDENTIFICATION, AND CONTROL OF A PNEUMATICALLY ACTUATED, FORCE CONTROLLABLE ROBOT; J.E. Bobrow and B.W. McDonell; Irvine, California 92697			
	AT	MODELLING AND SIMULATION OF PNEUMATIC CYLINDERS FOR A PHYSIOTHERAPY ROBOT; R. Richardson, A.R. Plummer, M. Brown; School of Mechanical Engrg., University of Leeds, UK; Instron Ltd., UK			
EXAMINER		DATE CONSIDERED			
J.D. Shary		9/27/05			
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.					



Sheet 1 of 1

FORM PTO-1449
LIST OF REFERENCES CITED BY
APPLICANTATTY. DOCKET NO.
VTE-152-BSERIAL NO.
10/817,511APPLICANT
Bugel et. al.FILING DATE
4/2/2004GROUP
3745

U. S. PATENT DOCUMENT

EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>TD</i>	AA	4,431,873	2/14/1984	Dunn et al.			
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT OR PUBLISHED PATENT APPLICATION

		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
<i>TD</i>	AJ	2004/0125472	7/01/20004	U.S.			
	AK						
	AL						
	AM						
	AN						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	AO	
	AP	
	AR	

EXAMINER

T. D. Brown

DATE CONSIDERED

9/26/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.



Sheet 1 of 1

FORM 69-1442 LIST OF REFERENCES CITED BY APPLICANT	ATTY. DOCKET NO. VTE-152-B	SERIAL NO. 10/817,511
	APPLICANT Bugel et al.	
	FILING DATE 04/2/2004	GROUP 3745

U. S. PATENT DOCUMENT

EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
<i>mm</i>	AA	6,870,305	3/22/05	Moler	<i>/</i>	<i>/</i>	5/14/04
<i>↓</i>	AB	4,686,338	8/11/1987	Kashiwagi et al.	<i>/</i>	<i>/</i>	2/6/1985
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT OR PUBLISHED PATENT APPLICATION

		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
<i>mm</i>	AS	US 2004/0035106	2/26/2004	US	<i>/</i>	<i>/</i>	N/A
<i>↓</i>	AR	US 2004/0045148	3/11/2004	US	<i>/</i>	<i>/</i>	N/A
<i>↓</i>	AO	JP-60-180026	9/13/1985	Japan	<i>/</i>	<i>/</i>	US 4,686,338

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER <i>T. Shoppe</i>	DATE CONSIDERED <i>9/26/05</i>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.	